Following most recent scan, mean sac size increased by 13mm (−20 to +26) with 17% having a reduction in sac size (n = 2).

Conclusion: Our results show a low success rate which is in keeping with current data. Given the small patient numbers, larger study is required to confirm our preliminary findings. To this end we are planning to review all EVAR procedures, re-intervention rates and post-operative outcomes.

Endovascular Hybrid Repair for Aortic Arch aneurysm: Case Series and Review

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The management of aortic arch aneurysm and dissection is challenging in often elderly patients with significant co-morbid disease. Although conventional open surgery of aortic arch disease with total arch replacement still remains the gold standard, in the use of endovascular hybrid techniques have evolved and may reduce the risk of surgical morbidity and mortality in these high-risk patients. In selected patients the endovascular hybrid technique combines surgical bypass or debranching of the arch vessels to creating a secure proximal landing zone for concomitant or delayed endovascular stent grafting of the aortic arch and thoracic aorta to exclude aneurysm or dissected segment. The classification scheme for hybrid arch debranching procedures is based on the extent of proximal and distal landing zone reconstruction required, and thus the need and extent of cardiopulmonary bypass and circulatory arrest management strategies to be employed.

Methods, Results and Conclusions: We present a case series describing the 3 common variants of the endovascular hybrid repair for aortic arch aneurysm, namely: 1) left carotid-subclavian bypass; 2) carotid-carotid bypass; 3) debranching of the aortic arch. Furthermore, we critically review the literature and comment on current future concepts including branched endovascular techniques for aortic arch aneurysm.

Keywords: Hybrid arch repair; aortic aneurysm; thoracic aortic aneurysm; debranching procedure; thoracic aortic endovascular stent grafting; endovascular repair.

Emergency Tansfer to Specialist Thoracic Endovascular Centre: A Safe and Feasaible Option

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Introduction: Endovascular repair has revolutionized the treatment of thoracic aortic disease. We report our 10 year experience using this treatment in emergency cases.

Methods: A prospectively held database (Vascubase) was analysed and all patients who underwent emergency thoracic stenting for acute aortic disease between 2005 and 2014 were identified.

Results: There were a total of 59 thoracic aorta stenting procedures. 33 patients (mean age = 58 years; 60% male) underwent emergency endovascular treatment for various thoracic pathologies: traumatic transection (n = 10), ruptured aneurysm (n = 6), non-traumatic dissection (n = 8) and penetrating aortic ulcer (n = 9).

All patients had self-expanding endografts implanted. 2 patients required debaranching before the endovascular treatment. Thirty-day mortality was 15.1% (5/33). 70% of the patients received a single device. There were 7 procedure related complications out of which 6 required re-intervention: thoracotomy and drainage in 2 patients, proximal graft extension in 1, open drainage of groin haematoma in 1 and open repair of R CFA pseudoaneurysm in 1 patient.

In total 23 patients were transferred from 11 centres nationwide. There were no mortalities or other complications related to transfer of patient from peripheral centres.

Conclusion: Endovascular repair is a safe and effective treamtenttreatment option which enables patients to be treated with lesser morbidity and mortality. Transfer of patients with acute pathology to a tertiary centre can safely be performed with good outcomes.

Comparative Results of Conventional and Eversion Carotid Endarterectomy

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Introduction: Conventional carotid endarterectomy (cCEA), performed through a longitudinal arteriotomy is the most frequently described technique. Eversion carotid endarterectomy (eCEA), employing division at the origin of the internal carotid artery and reanastomosis, is reported to be associated with low perioperative stroke and restenosis rates. In our institution eCEA was introduced in January 2012. Our aim was to compare the outcome of eCEA to cCEA in our patients.

Variable	eCEA	cCEA	Total
Total procedures	63	114	177
Symptomatic	39	82	121
Asymptomatic	24	32	56
Operative time in min (Range)	55—100	110—150	55—150
Shunts	1	22	23
Perioperative Stroke	0	0	0
Follow up Duplex scans	44	88	132
30 Day Mortality	0	0	0
Re stenosis (range 20 to 70%).	1	4	5
Haematoma	5	2	7
Re exploration	4	2	6

Methods:

In this longitudinal, retrospective, comparative, cohort study, all patients undergoing carotid endarterectomy from July 2008 to July 2014 in St Vincent's University

Hospital, by the senior author were included. Data was collected from statistics department, theatre database, discharge registry, ICU and HDU register and patient clinical notes. Study end-points included operative time, shunt use, perioperative stroke, 30 day mortality, restenosis and re intervention.

Results: 114 cCEA procedures were undertaken from July 2008 to December 2011, while 63 eCEA performed during Jan 2012 to July 2014. Results are shown in Table 1. Intra-arterial shunts were used in 19 % of cCEA and 1.6% of eCEA cases. Patients were followed postoperatively by Duplex imaging. Death and stroke rate in both groups was 0 %. Operative time for eCEA was significantly less that the cCEA. There were 5 restenosis in cCEA and only one in eCEA (range 20 to 70%).

Conclusion: eCEA is safe and effective technique for carotid endarterectomy. It significantly reduces the operative time with low re-stenosis rate.

VASCULAR PHYSIOLOGIST ABSTRACTS

Experiences of Vascular Surgeons in the Diagnosis of Peripheral Arterial Disease

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Background: Peripheral arterial disease (PAD) has a prevalence of between 10—25% in the over 55's, increasing with age, with 70%—80% of affected individuals asymptomatic. Up to 50% of PAD can be missed on routine examination alone. Therefore identification and appropriate management of this high risk group is essential. PAD is a significant indicator of the severity of atherosclerotic disease in other vascular beds and is associated with increased risk of cardiovascular and cerebrovascular disease.

Aim: Vascular Consultants are the most important constituent in the diagnosis of peripheral arterial disease. As such the aim of this study was to ascertain the experiences of vascular consultants in this process with the objective of identifying elements of the process which can be improved upon. This will result in greater efficiencies of resources for vascular consultants and a streamlined more expedient deliver of service for the patient.

Method: 43 Vascular Consultants were anonymously surveyed. Results were collected via Survey Monkey & hard copy. 22 completed surveys returned.

Conclusions: The experiences of respondents are varied. Generally referral information is adequate. However, it may be of little consequence as most will reorder an in-house test in any event. Vascular services are primarily obtained in a dedicated laboratory in a public hospital. However, there seems to be a diverse range of providers being utilised. That said the vast majority of respondents do not believe results from other institutions. Importantly 50% of respondents rate the diagnostic vascular service as excellent with 20% rating it average or below average.

Interestingly 82% of respondents suggest that PAD surveillance should be done by GP's, but how many discharge patients back to their GP?

Duplex Ultrasound — An Invaluable Tool in Pregnancy

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Though computed tomography angiography (CTA) remains the gold standard for arterial imaging duplex ultrasound has many advantages including;

- Lack of radiation
- Cost and
- Repeatability

We present a case report of a 35-year old lady with a history of von Willebrand's disease who presented at 32 weeks gestation with left knee pain and a pulsatile swelling. Duplex ultrasound revealed a left 2.5cm popliteal artery pseudoaneurysm with significant thrombus. Due to her pregnancy she underwent an MR angiogram which confirmed a 2.4cm left popliteal aneurysm but CTA was recommended for full evaluation. Duplex ultrasound was used to outrule concomitant aneurysms.

A decision was made not to perform a CTA and the patient was followed up with weekly duplex ultrasounds to monitor the size of the popliteal aneurysm during the rest of her pregnancy. Over the next five weeks her aneurysm increased in size to 3cm. She was delivered at 37 weeks by elective caesarean section and underwent a CTA 6 weeks later and this confirmed a left popliteal pseudoaneurysm which was later stented.

Duplex follow-up reveals a widely patent popliteal stent with exclusion of the pseudoaneurysm.

Carotid Duplex Ultrasound Performed Immediately Post Carotid Endarterectomy Predicts Outcome at Two Years

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Introduction: Carotid endarterectomy (CEA) has proven benefit in stroke prevention. The aim of this study was to determine the long-term benefit of the post-operative colour duplex ultrasound (CDU) in a follow-up programme.

Patients and Methods: All patients who underwent CEA for both symptomatic and asymptomatic carotid artery stenosis between the 1st January 2007 and 31st of December 2008 were included. All patients were enrolled in a standard post-operative surveillance programme, which included a CDU within 2 days post operatively, at 6 months and at 2 years. All scans were performed by one of four